

## **REMARKS**

The specification and claim 30 have been amended to correct typographical errors appearing therein. It is submitted that no new matter has been added to the instant Application with the amendments to the specification or claim 30.

Claims 18-47 are pending and have been rejected in the instant Application. Claims 18-47 remain in the Application. Applicants respectfully traverse the rejections for the reasons expressed herein below.

The Examiner has rejected claims 18-47 under 35 U.S.C. § 103(a) for obviousness over United States Patent No. 4,603,143 to Schmidt ("Schmidt"). Specifically, the Examiner asserts that Schmidt discloses vitamin active powders which are more free-flowing and stable than conventional vitamin powders, the composition comprising at least one fat-soluble vitamin material and a silicon containing material, which thereby renders obvious the claims of the present invention. The Examiner acknowledges that Schmidt does not teach the specific particle size for the silica, but asserts that the determination of a particular particle size is within the skill of the ordinary worker as part of normal optimization.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the combination of prior art. MPEP §2143.03. In addition, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. MPEP §2143. Put another way, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the

desirability of the combination or modification. MPEP §2143.01. In addition, it must be remembered that that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. MPEP §2143.02

Applicants respectfully submit that Schmidt does not render obvious claims 18-47 of the present invention. Also, it is submitted that there is no motivation or suggestion in Schmidt to employ silica particles having a particle size of between 40 and 50 microns, as claimed in the present invention. Indeed, Applicants assert that Schmidt teaches away from the present invention and the claimed silica particle size, and, therefore, cannot form the basis of a *prima facie* obviousness rejection as asserted by the Examiner.

Applicants submit that numerous portions of Schmidt clearly lead one of ordinary skill in the art away from employing silica particles having a particle size within the 40-50 micron range claimed in the present invention. The Examiner's attention is called to col. 2, lines 14-19 of the Schmidt disclosure, which states:

The size of these agglomerates is such that preferably at least 50 percent of the total number of agglomerates will have a minimum length, width, or both of 300 microns. For purposes of this invention disclosure, any agglomerate which has a particle size of less than 50 microns is not counted in the total when determining whether 50 percent of the total number of agglomerates has a minimum length, width, or both of 300 microns.

Emphasis added

As noted, Schmidt identifies silica particle size of less than 50 microns to be so insignificant or inconsequential that this range it is not even counted in the particle size calculations. It is asserted that one of skill in the art reading this portion of Schmidt

would consider silica particles of less than 50 microns to be inconsequential to the Schmidt disclosure, and, therefore, would be led away from employing silica having small particle sizes of below 50 microns, such as those recited in the claims of the present invention.

Furthermore, in Table I, Table II, and the analysis that follows Table II, Schmidt clearly states that only HI-SIL 231 (i.e. the only product with measured flowability), to be within the scope of the Schmidt invention, while SIPERNAT 22 and ZEOSYL 110SD are "outside the scope" of the invention (See, 5, lines 10-11 and col. 6, lines 10-14). Schmidt notes that HI-SIL 231 has a significant percentage of particle size distribution much greater than 150 microns (87.6 % weight (wt.) retained by a 100 Mesh sieve (~150 microns), as indicated in Table I, while those commercial products having a particle distribution skewed to the smaller sized particles, but still very large relative to the claims of the present invention (i.e., ZEOSYL 110SD, which includes 84% weight retained by a 100 mesh screen, and SIPERNAT 22 with 35% wt. retained by an 80 mesh sieve), are "outside the scope" of the Schmidt invention.

In this regard, it is respectfully submitted that the Examiner has misinterpreted the results of Schmidt's Example 1, wherein the Examiner indicates that 90.9% of the particles pass through a 100 mesh screen (See, page 5 of Office Action), as Schmidt explicitly reports at col. 4, lines 63-64 that only 48.5% pass through a 100 mesh screen). Accordingly, in this example, at least 51.5% of the particles have a particle size of greater than 150 microns.

In view of the above, Applicants assert that when the teachings of Schmidt are taken as a whole, elements of the recited invention, such as the claimed silica particle size, are not taught or suggested by Schmidt.

The Examiner acknowledges that Schmidt does not teach the particle size range of the present invention, but asserts that the determination of a particle size from within a broad range is within the skill of the ordinary worker as part of normal optimization. As discussed above, it is the Applicants' assertion that the claimed particle size range of between 40 and 50 microns is not within the range disclosed in Schmidt, and that Schmidt teaches away from this range. In addition, the Applicants assert that the claimed particle size range is not merely optimization of a broader particle size range that may be accomplished by one of ordinary skill in the art. Under §103, the burden is on the PTO to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art and/or that knowledge generally available to one of the ordinary skill in the art would lead that individual to combine the relevant teachings. It is respectfully submitted that the PTO has not met this burden. As discussed above, the Examiner has cited no reference, either alone or in combination, which teaches or suggests application of a silica particle for a vitamin powder having a particle size range between 40 and 50 microns. Indeed, it is asserted that the only reference cited by the Examiner teaches away from the claimed particle size range.

The present invention as recited in the claims is not mere optimization. The present invention discloses the importance of particle size range in vitamin powder

compositions. The parameters, the method in which they applied, and the advantages arising therefrom are not disclosed or suggested in Schmidt.

It is also asserted that the Examiner's application of Schmidt to reject claims 18-47 is improper as being hindsight reconstruction or an unsupported suggestion that it is "obvious to try" various combinations of silica particle size ranges to arrive at the presently claimed invention. The CAFC states the law for combining references in In re Geiger, 2 USPQ 2d 1276 (1987):

Appellant contends that the PTO failed to establish a prima facie case of obviousness and, consequently, that the board's affirmance of the examiner's rejection was erroneous. Appellant argues that the PTO's position represented hindsight reconstruction or, at best, established that it would have been "obvious to try" various combinations of known scale and corrosion prevention agents, including the combination recited in the appealed claims.

We agree with appellant that the PTO has failed to establish a prima facie case of obviousness. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination. ACS Hospital Systems, Inc. v Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929,933 (Fed. Cir. 1984).

The Examiner acknowledges that Schmidt does not teach a silica particle having a particle size range as claimed in the present invention. In addition, the compositions of Schmidt are clearly directed to a different and significantly greater particle size than that which is claimed in the present invention. Also, there is no suggestion in Schmidt to employ the claimed particle size. Indeed, as discussed above, Schmidt clearly suggests that the claimed particle size range of between 40 and 50 microns is inconsequential to the Schmidt invention.

In addition to the distinctions set forth above, Schmidt provides no teaching of other limitations set forth in, for example, claims 18-21. Claims 18-21 recite that the composition includes about 5 to about 34 weight percent redried corn starch, and at least 65 to about 80 weight percent of at least one vitamin. It is submitted that these features of claims 18-21, in addition to the particle size of the silica properties, provide a novel and unobvious composition that, in part, allows higher levels of vitamins (as opposed to Schmidt's 40-60%) to be used in the present invention. The Examiner has failed to cite any teaching in Schmidt, or its equivalent, of these recitations.

In addition, the Examiner's attention is drawn to the Morris Declaration dated September 4, 2003 (filed with the PTO on September 10, 2003), wherein Charles Morris, an inventor of the instant application, avers to the fact that the use of silica particles in the 40-50 micron-size range produces unexpected results in the successful production of vitamin powders when compared to larger silica particles, such as those employed by Schmidt. The Examiner is asked to reconsider this evidence that supports the unexpected results in light of the teachings of Schmidt, and the importance of silica particle sizes within the claimed range of between 40 and 50 microns.

For at least the reasons discussed above, Applicants respectfully request reconsideration of the rejections of claims 18-47 for obviousness over Schmidt. Applicants believe that claims 18-47 define over the prior art of record and are in proper form for allowance. Applicants respectfully request allowance of claims 18-47.

If the undersigned can be of assistance to the Examiner in addressing issues to advance the application to allowance, please contact the undersigned at the number set forth below.

Respectfully submitted,



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